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ABSTRACT OF THE DISCLOSURE

[0040] The present invention is a system and method of ablation laser-machining, that includes the steps of generating pulses at 1 to 50 MHz by one or more semiconductor-chip laser diodes, each pulse having a pulse-duration less than three picoseconds, directing a less than 1 square mm beam of the pulses to a work-piece with an ablating pulse-energy-density; and scanning the beam with a power-driven scanner to ablate a scanned area at least 25 times larger than the beam area.